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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/748,655

12/31/2003

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0026-0049

2801

44989

7590

03/21/2008

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EXAMINER

ALI, FARHAD

ART UNIT

PAPER NUMBER

2146

MAIL DATE

DELIVERY MODE

03/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,655	Applicant(s) NEVILL-MANNING ET AL.	
	Examiner FARHAD ALI	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuda (US 6,718,333 B1).

Matsuda teaches:

Claim 1

A method comprising:

receiving a first uniform resource locator (URL) (**Column 2 Lines 24-26, “The structural feature extracting section may include a URL feature extractor”**) including one or more parameters; retrieving content corresponding to the first URL; retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; identifying a parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL; and generating one or more URL rewrite rules based on the identified parameter combination (**Column 2 Lines 43-59, “In another aspect of the present invention, the structured document search system using the structured**

document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Claim 2

The method of claim 1, wherein the different parameter combinations include the first URL with no parameters, the first URL with each of the one or more parameters individually, and the first URL with combinations of the one or more parameters (**Column 2 Lines 59-64, “Instead of the restrictor, the system may have a separator for receiving the search results from the search engine, receiving the relevance of the structured documents found by the type searcher, grouping the found documents according to their relevance to the input type, and outputting the search results to the input/output device”).**

Claim 3

The method of claim 1, further comprising:

performing the receiving a first URL (**Column 2 Lines 24-26, “ The structural feature extracting section may include a URL feature extractor”**), the retrieving content corresponding to a first URL , the retrieving content corresponding to a plurality of URLs, and the identifying a parameter combination, for multiple different first URLs, each first URL including the same parameters; and

generating the one or more URL rewrite rules for the identified parameter combinations for each of the first URLs (**Column 2 Lines 43-59, “In another aspect of the present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”**).

Claim 4

The method of claim 3, wherein the rewrite rules specify that parameters that do not occur in a threshold number of the identified parameter

combinations are to be removed (**Column 5 Lines 50-53, "If all the verifications according to the rules for the types in the structural feature rule base 130 are successful, the verifier 120 scores a full mark, which is defined as 100%. The verifier 120 outputs the relevance to each type" and Column 2 Lines 43-59, "the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device")**).

Claim 5

The method of claim 1, wherein each rewrite rule applies to a particular web site or web host (**See Figure 13, #200 Document database**).

Claim 6

The method of claim 1, wherein identified parameter combination includes a minimum number of parameters (**Column 4 Lines 61-64, "The structural feature rule base 130 includes the rule shown in FIG 3. The rule, forms, and scores shown in FIG 3 are only examples, the present invention is not limited to this" and Column 5 Lines 50-53, "If all the verifications according to the rules for the types in the structural feature rule base 130 are successful, the verifier 120 scores a full mark, which is defined as 100%. The verifier 120 outputs the relevance to each type" and Column 2 Lines 43-59, "the relevance being**

calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Claim 7

A method for converting a uniform resource locator (URL) into a canonical form of the URL, the method comprising:

receiving a URL (**Column 2 Lines 24-26, “ The structural feature extracting section may include a URL feature extractor”**) that refers to content and that contains a parameter set including at least one parameter;

determining a rewrite rule by receiving a plurality of URLs that include the parameter set and identifying parameters in the parameter set that do not contribute to content;

applying the rewrite rule to the URL by removing the parameters that don not contribute to content from the URL; and outputting the rewritten URL as the canonical form of the URL (**Column 2 Lines 43-59, “In another aspect of the present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for**

searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Claim 8

Cancelled

Claim 9

The method of claim 7, wherein the identifying parameters in the parameter set that do not contribute to content includes retrieving content corresponding to a sampled URL containing combinations of parameters in the parameter set and identifying a combination of parameters for which the retrieved content is approximately the same as the content corresponding to the parameter set and that contains a reduced number of parameters (**Column 2 Lines 43-59, “In another aspect of the present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for searching for the relevance to the input type found**

by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Claim 10

The method of claim 9, wherein the combinations of parameters include the sampled URL with no parameters, the sampled URL with individual parameters, and the sampled URL with combinations of the at least one parameter **Column 2 Lines 43-59, “In another aspect of the present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device” and Column 2 Lines 59-64, “Instead of the restrictor, the system may have a separator for receiving the search results from the search engine, receiving the relevance of**

the structured documents found by the type searcher, grouping the found documents according to their relevance to the input type, and outputting the search results to the input/output device").

Claim 11

The method of claim 7, wherein the rewrite rule applies to a particular web site or web host **(See Figure 13, #200 Document database).**

Claim 12

One or more devices comprising:

at least one fetch bot configured to download content on a network from locations specified by uniform resource locators (URLs) **(Column 2 Lines 24-26, “ The structural feature extracting section may include a URL feature extractor”);**

a content manager configured to extract URLs from the downloaded content ; a rewrite component configured to receive a URL that refers to content and that contains a parameter set including at least one parameter;

apply a predetermined rewrite rule to the URL that removes the at least one parameter from the URL when the at least one parameter does not affect the content referred to by the URL, where the predetermined rewrite rule is determined by receiving a plurality of URLs that include the parameter set and identifying parameters in the parameter set that do not contribute to content; and

output the rewritten URL as the canonical form of the URL (**Column 2 Lines 43-59**, “In another aspect of the present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Claim 13

Cancelled

Claim 14

The one or more devices of claim 12, wherein the identifying parameters in the parameter set that do not contribute to content includes retrieving content corresponding to a sampled URL containing combinations of parameters in the parameter set and identifying a combination of parameters for which the retrieved content is approximately the same as the content corresponding to the parameter set and that contains a minimum number of parameters (**Column 2 Lines**

43-59, “In another aspect of the present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Claim 15

The one or more devices of claim 14, wherein the combinations of parameters include the sampled URL with no parameters, the sampled URL with individual parameters, and the sampled URL with combinations of the at least one parameter **(Column 2 Lines 59-64, “Instead of the restrictor, the system may have a separator for receiving the search results from the search engine, receiving the relevance of the structured documents found by the type searcher, grouping the found documents according to their relevance to the input type, and outputting the search results to the input/output device”).**

Claim 16

The one or more devices of claim 12, wherein each rewrite rule applies to a particular web site or web host **(See Figure 13, #200 Document database)**.

Claim 17

A system comprising:

means for receiving a first uniform resource locator (URL) **(Column 2 Lines 24-26, “ The structural feature extracting section may include a URL feature extractor”)** including one or more parameters;

means for retrieving content corresponding to the first URL; means for retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; means for identifying the parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL and that contains a minimum number of parameters; and

means for generating one or more URL rewrite rules based on the identified parameter combination **(Column 2 Lines 43-59, “In another aspect of the present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for**

searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Claim 18

A computer-readable medium including programming instructions executed by a processor, the programming instructions comprising:

instructions for receiving a first uniform resource locator (URL) (**Column 2 Lines 24-26, “ The structural feature extracting section may include a URL feature extractor”**) including one or more parameters;

instructions for retrieving content corresponding to the first URL;

instructions for retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; instructions for identifying the parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL and that contains a minimum number of parameters; and

instructions for generating one or more URL rewrite rules based on the identified parameter combination (**Column 2 Lines 43-59, “In another aspect of the**

present invention, the structured document search system using the structured document classification device, comprises: a input/output device for inputting a search parameter and a type of a target structured document and for outputting the search results; a search engine for performing a search in a database storing structures documents by the input search parameter; a type searcher for searching for the relevance to the input type found by the search engine, the relevance being calculated by the structured document classification device; and a restrictor for receiving the search results of the structured document found by the type restrictor, restricting the search results by consulting the relevance to the input type, and outputting the narrowed search results to the input/output device”).

Response to Arguments

Applicant's arguments with respect to the rejection(s) of claim(s) 1-18 under 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhad Ali whose telephone number is (571) 270-1920. The examiner can normally be reached on Monday thru Friday, 7:30am to 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Farhad Ali/
Examiner, Art Unit 2146

/JEFF PWU/
Supervisory Patent Examiner, Art Unit 2146